

AMENDMENTS TO THE CLAIMS

1. (Cancelled).
2. (Previously Presented) The method of claim 41, wherein the plurality of semantic approaches include treating a candidate multiple-term interpretation as a conjunction.
3. (Previously Presented) The method of claim 41, wherein the plurality of semantic approaches include treating a candidate multiple-term interpretation as a disjunction.
4. (Previously Presented) The method of claim 41, wherein the plurality of semantic approaches include partially matching a candidate multiple-term interpretation.
5. (Previously Presented) The method of claim 41, wherein the plurality of semantic approaches include a disjunctive approach, a conjunctive approach and a partial match approach.
6. (Previously Presented) The method of claim 41, wherein for the first candidate multiple-term interpretation the contextual score incorporates information about the particular semantic approach that is used for the set of associated items.
7. (Previously Presented) The method of claim 6, wherein incorporating information about the particular semantic approach includes using a measure of a number of terms in the first candidate multiple-term interpretation that are in the set of associated items.
8. (Previously Presented) The method of claim 7, wherein using a measure of a number of terms in the first candidate multiple-term interpretation that are in the set of associated items is a dominant factor in determining the contextual score.
9. (Currently Amended) The method of claim 41, further comprising the steps of identifying a third candidate single-term interpretation associated with the first query term and identifying a fourth candidate single-term interpretation associated with the second query term, identifying a second candidate multiple-term interpretation, wherein the second candidate multiple-term interpretation is a combination of at least the third candidate single-term

interpretation and the fourth candidate single-term interpretation, and identifying a second set of associated items in the database being searched that are associated with the second candidate multiple-term interpretation according to a second particular semantic approach of said plurality of semantic approaches, and determining a second contextual score for the second candidate multiple-term interpretation from the second set of associated items, wherein the particular semantic approach and the second particular semantic approach are different.

10. (Currently Amended) The method of claim 41, the step of identifying a set of associated items further including selecting a first semantic approach of said plurality of semantic approaches and determining a first set of associated items in the database being searched that are associated with the first candidate multiple-term interpretation according to the first semantic approach, and selecting a second semantic approach of said plurality of semantic approaches and determining a second set of associated items in the database being searched that are associated with the first candidate multiple-term interpretation according to the second semantic approach, and selecting between the first set of associated items and the second set of associated items to identify the set of associated items for determining the contextual score for the first candidate multiple-term interpretation.

11. (Cancelled).

12. (Cancelled)

13. (Currently Amended) The method of claim 42, wherein the database being searched includes at least one item that is not associated with any of the first, second or third single-term interpretations, wherein pruning the candidate single-term interpretations includes generating a second query that identifies a reduced set of all of the items in the database being searched that are associated with any of the first, second or third candidate single-term interpretations, and evaluating an intersection query for each of the first, second and third candidate single-term interpretations with the reduced set to identify a set of associated items for each of the first, second and third candidate single-term interpretations.

14. (Previously Presented) The method of claim 13, wherein the threshold is 1.

15. (Currently Amended) The method of claim 42, wherein the database being searched includes at least one item that is not associated with any of the candidate single-term interpretations, wherein pruning includes determining a reduced set of all of the items in the database being searched that are associated with any of the candidate single-term interpretations.

16. (Cancelled)

17. (Cancelled)

18. (Previously Presented) The method of claim 42, further comprising determining a first score for the first candidate single-term interpretation, that depends on the first query term but not on query terms other than the first query term, nor on any single-term interpretations associated with the query terms other than the first query term, a second score for the second candidate single-term interpretation, that depends on the first query term but not on query terms other than the first query term, nor on any single-term interpretations associated with the query terms other than the first query term, and a third score for the third candidate single-term interpretation, that depends on the second query term but not on query terms other than the second query term, nor on any single-term interpretations associated with the query terms other than the second query term, wherein pruning includes using the first, second and third scores of the candidate single-term interpretations for selecting candidate single-term interpretations to prune.

19. (Cancelled)

20. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 45, wherein for the first candidate multiple-term interpretation the contextual score incorporates information about the particular semantic approach that is used.

21. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 45, wherein the plurality of semantic approaches include a conjunctive approach.

22. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 45, wherein the plurality of semantic approaches include a disjunctive approach.

23. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 45, wherein the plurality of semantic approaches include a partial match approach.

24. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 45, wherein the plurality of semantic approaches include a disjunctive approach, a conjunctive approach and a partial match approach.

25. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 45, wherein instructions for causing a computer to incorporate information about the particular semantic approach used include instructions for using a measure of a number of terms in the first candidate multiple-term interpretation that are in the set of associated items.

26. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 25, wherein using a measure of a number of terms in the first candidate multiple-term interpretation that are in the set of associated items is a dominant factor in determining the contextual score.

27. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim [[19]]45, further comprising instructions for causing a computer to identify a third candidate single-term interpretation associated with the first query term and a fourth candidate single-term interpretation associated with the second query term, identify a second candidate multiple-term interpretation which is a combination of at least the third candidate single-term interpretation and the fourth candidate single-term interpretation, identify a second set of associated items in the database being searched that are associated with the second candidate multiple-term interpretation according to a second particular semantic approach of said plurality of semantic approaches, and determine a second contextual score for the second candidate multiple-term interpretation from the second set of associated items, wherein the particular semantic approach and the second particular semantic approach are different.

28. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim [[19]]~~45~~5, wherein instructions for causing a computer to determine a contextual score for the first candidate multiple-term interpretation include instructions for applying a first of said plurality of semantic approaches for identifying a first set of associated items and a second of said plurality of semantic approaches for identifying a second set of associated items for the first candidate multiple-term interpretation, and selecting between the first set of associated items and the second set of associated items to identify the set of associated items for determining the contextual score for the first candidate multiple-term interpretation.

29. (Cancelled)

30. (Cancelled)

31. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 46, wherein the database being searched includes items that are not associated with any of the first, second or third candidate single-term interpretation, wherein pruning includes generating a second query that identifies a reduced set of all of the items associated with any of the first, second or third candidate single-term interpretations, evaluating an intersection query for each of the first, second and third candidate single-term interpretations with the reduced set to identify a set of associated items for each of the first, second and third candidate single-term interpretations.

32. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 31, wherein the threshold is 1.

33. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 46, wherein instructions for causing a computer to prune include instructions for determining a set of all of the items in the database being searched that are associated with any of the first, second, or third candidate single-term interpretations.

34. (Cancelled)

35. (Cancelled)

36. (Currently Amended) The ~~computer program product~~ computer-readable storage medium of claim 46, further comprising instructions for determining a first score for the first candidate single-term interpretation, that depends on the first query term but not on query terms other than the first query term, nor on any single-term interpretations associated with the query terms other than the first query term, a second score for the second candidate single-term interpretation, that depends on the first query term but not on query terms other than the first query term, nor on any single-term interpretations associated with the query terms other than the first query term, and a third score for the third candidate single-term interpretation, that depends on the second query term but not on query terms other than the second query term, nor on any single-term interpretations associated with the query terms other than the second query term, wherein instructions for causing a computer to prune include instructions for using the first, second and third scores for selecting candidate single-term interpretations to prune.

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Currently Amended) A computer-implemented method of interpreting a multiple-term query, formed of at least a first query term and a second query term, to retrieve items from a database being searched, the method comprising:

identifying at least one candidate single-term interpretation for the first query term;

identifying at least one candidate single-term interpretation for the second query term;

identifying a plurality of candidate multiple-term interpretations, each candidate multiple-term interpretation being formed from a plurality of the candidate single-term interpretations;

providing a plurality of semantic approaches for associating a candidate multiple-term interpretation with items in the database being searched;

determining a quantity of database items associated with each respective candidate multiple-term interpretation according to each of said semantic approaches;

determining a contextual score for each candidate multiple-term interpretation based at least in part on the quantity of ~~database~~ items associated with each respective candidate multiple-term interpretation in the database being searched;

selecting at least one candidate multiple-term interpretation based on its score; and

retrieving at least one item from the database being searched using the at least one selected candidate multiple-term interpretation.

42. (Currently Amended) A computer-implemented method of interpreting a multiple-term query, formed of at least a first query term and a second query term, to retrieve items from a database being searched, the method comprising:

identifying at least a first candidate single-term interpretation and a second candidate single-term interpretation associated with the first query term;

identifying at least a third candidate single-term interpretation associated with the second query term;

pruning the candidate single-term interpretations, wherein the first and third candidate single-term interpretations each have more associated items than a threshold, and wherein the second candidate single-term interpretation has fewer associated items than the threshold, by eliminating the second candidate single-term interpretation;

identifying a plurality of candidate multiple-term interpretations, wherein a candidate multiple-term is a combination of at least the first candidate single-term interpretation and the third candidate single-term interpretation;

determining a contextual score for each candidate multiple-term interpretation based at least in part on a quantity of ~~database~~ items associated with each respective candidate multiple-term interpretation in the database being searched;

selecting at least one candidate multiple-term interpretation based on its score; and

retrieving at least one item from the database being searched using the at least one selected candidate multiple-term interpretation.

43. (Currently Amended) A computer-implemented method of interpreting a multiple-term query, formed of at least a first query term and a second query term, to retrieve items from a database being searched, the method comprising:

- identifying at least one candidate single-term interpretation for the first query term;
- identifying at least one candidate single-term interpretation for the second query term;
- determining a context-independent score for each candidate single-term interpretation;
- identifying a plurality of candidate multiple-term interpretations, each candidate multiple-term interpretation being formed from a plurality of the candidate single-term interpretations;
- determining a combined context-independent score for each of the candidate multiple-term interpretations based at least in part on the context-independent scores of the candidate single-term interpretations forming each candidate multiple-term interpretation;
- providing a plurality of semantic approaches for associating a candidate multiple-term interpretation with items in the database;
- determining a quantity of database items associated with each respective candidate multiple-term interpretation according to each of said semantic approaches;
- determining a contextual score for each candidate multiple-term interpretation based at least in part on the quantity of ~~database~~ items associated with each respective candidate multiple-term interpretation in the database being searched;
- determining an overall score for each candidate multiple-term interpretation based at least in part on the contextual score and the combined context-independent score of each candidate multiple-term interpretation;
- selecting at least one candidate multiple-term interpretation based on its overall score; and
- retrieving at least one item from the database being searched using the at least one selected candidate multiple-term interpretation.

44. (Currently Amended) A computer-implemented method of interpreting a multiple-term query, formed of at least a first query term and a second query term, to retrieve items from a database being searched, the method comprising:

identifying at least a first candidate single-term interpretation and a second candidate single-term interpretation associated with the first query term;

identifying at least a third candidate single-term interpretation associated with the second query term;

pruning the candidate single-term interpretations, wherein the first and third candidate single-term interpretations each have more associated items than a threshold, and wherein the second candidate single-term interpretation has fewer associated items than the threshold, by eliminating the second candidate single-term interpretation;

determining a context-independent score for at least the first candidate single-term interpretation and the third candidate single-term interpretation;

identifying a plurality of candidate multiple-term interpretations, wherein a candidate multiple-term is a combination of at least the first candidate single-term interpretation and the third candidate single-term interpretation;

determining a combined context-independent score for each of the candidate multiple-term interpretations based at least in part on the context-independent scores of the candidate single-term interpretations forming each candidate multiple-term interpretation;

determining a contextual score for each candidate multiple-term interpretation based at least in part on a quantity of ~~database~~ items associated with each respective candidate multiple-term interpretation in the database being searched;

determining an overall score for each candidate multiple-term interpretation based at least in part on the contextual score and the combined context-independent score of each candidate multiple-term interpretation;

selecting at least one candidate multiple-term interpretation based on its overall score; and

retrieving at least one item from the database being searched using the at least one selected candidate multiple-term interpretation.

45. (Currently Amended) A ~~computer program product, residing on a computer-readable storage medium[[],]~~ storing computer-executable instructions for [[use in]] interpreting queries, wherein a first query is composed of at least a first query term and a second query term, relative to a database of items being searched, the ~~computer program product~~ computer-executable instructions comprising instructions for causing a computer to:

- identify at least one candidate single-term interpretation for the first query term;
- identify at least one candidate single-term interpretation for the second query term;
- identify a plurality of candidate multiple-term interpretations, each candidate multiple-term interpretation being formed from a plurality of the candidate single-term interpretations;
- provide a plurality of semantic approaches for associating a candidate multiple-term interpretation with items in the database;
- determine a quantity of database items associated with each respective candidate multiple-term interpretation according to each of said semantic approaches;
- determine a contextual score for each candidate multiple-term interpretation based at least in part on the quantity of ~~database~~ items associated with each respective candidate multiple-term interpretation in the database being searched;
- select at least one candidate multiple-term interpretation based on its score; and
- retrieve at least one item from the database being searched using the at least one selected candidate multiple-term interpretation.

46. (Currently Amended) A ~~computer program product, residing on a computer-readable storage medium[[],]~~ storing computer-executable instructions for [[use in]] interpreting queries, wherein a first query is composed of at least a first query term and a second query term, relative to a database of items being searched, the ~~computer program product~~ computer-executable instructions comprising instructions for causing a computer to:

- identify at least a first candidate single-term interpretation and a second candidate single-term interpretation associated with the first query term;
- identify at least a third candidate single-term interpretation associated with the second query term;

prune the candidate single-term interpretations, wherein the first and third candidate single-term interpretations each have more associated items than a threshold, and wherein the second candidate single-term interpretation has fewer associated items than the threshold, by eliminating the second candidate single-term interpretation;

identify a plurality of candidate multiple-term interpretations, wherein a candidate multiple-term is a combination of at least the first candidate single-term interpretation and the third candidate single-term interpretation;

determine a contextual score for each candidate multiple-term interpretation based at least in part on a quantity of ~~database~~ items associated with each respective candidate multiple-term interpretation in the database being searched;

select at least one candidate multiple-term interpretation based on its score; and

retrieve at least one item from the database being searched using the at least one selected candidate multiple-term interpretation.